



Nevada Department of Transportation

STORMWATER PROGRAM UPDATE

April 11, 2016

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Deputy Director



BACKGROUND

In 2011, NDOT was audited by the U.S. Environmental Protection Agency and the Department's Stormwater Program was found to be inadequate.

In June of 2015, the Nevada Legislature approved Senate Bill 324 and a budget amendment which gave NDOT the resources and authority necessary to build a fully compliant Stormwater Program.

SB 324 provided NDOT with enforcement authority to prevent unauthorized discharges onto state highways, rights-of-way and conveyance systems.

NDOT is working with the EPA and Nevada Division of Environmental Protection to implement a Stormwater Program that meets or exceeds all requirements.



US EPA

Parties have reached conceptual agreement on settlement terms.

Legal steps to finalize the Consent Decree are proceeding.





STATUS UPDATE

- Deputy Director
- Stormwater Division Chief
- Information Manager
- Design and Planning Manager
- Program Manager
- Compliance/Enforcement Manager

Hiring of additional staff is ongoing, including compliance and maintenance personnel in the 3 districts.

All major equipment for FY16 is on order. Pickups and sedans are arriving.



PROGRAM DEVELOPMENT

- Stormwater Management Plan
- Annual Report
- Public Stormwater Education Program
- Employee Training
- Construction Site Runoff Control Program
- Post-Construction Stormwater Management Program
- Illicit Discharge Detection and Elimination
- Operation and Maintenance Program
- Maintenance Facilities





MAINTENANCE YARD PROJECTS

- Reno Maintenance Yard
 - Scheduled completion 2016
- Carson City Maintenance Yard
 - Phase One 85% complete
 - Phase Two completion scheduled May 2016
- Continuing to identify maintenance yard improvement needs





MEETINGS

Advisory Committee on Transportational Storm Water Management (ACTSWM)

Interim Finance Committee (IFC)

Stormwater Quality Management Committee (SQMC)

Associated General Contractors (AGC)

Nevada Contractors Association (NCA)



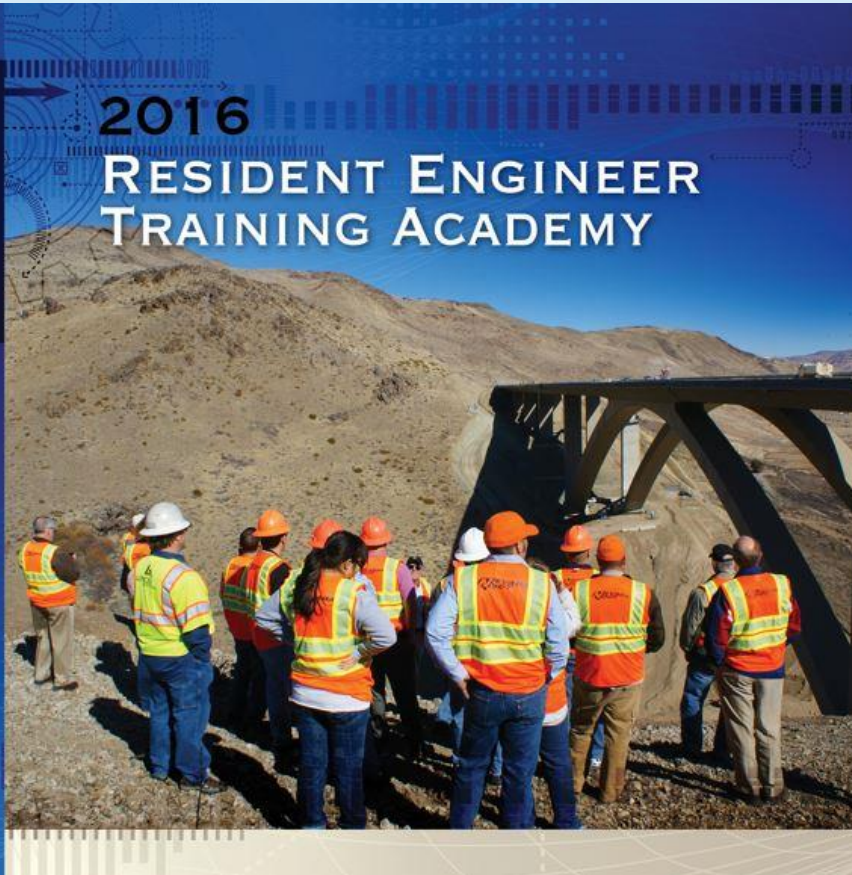
RESIDENT ENGINEERS

March 8-10 – RE Meeting, Elko

April 13 – RE Academy, Reno



2016 RESIDENT ENGINEER TRAINING ACADEMY





PUBLIC OUTREACH SOCIAL MEDIA

Twitter & Facebook January 01 – March 28, 2016



63,502 Impressions



9,052 Reached



NDOT Stormwater News
7 videos with 1,715 total views





PUBLIC OUTREACH

Stormwater Fact Sheets

Stormwater Best Management Practices

INDUSTRIAL and COMMERCIAL FACILITIES

Protecting Nevada's Waters
Nevada Department of Transportation

Pollutants can be found in many of the products and materials used at industrial and commercial facilities. Every facility must take steps to prevent pollutants from entering the storm drain system, where they can then find their way to our lakes and streams.

There are many actions, or Best Management Practices (BMPs), that can be taken to keep pollutants out of the storm drains. Some commonly used BMPs include:

Material Storage
Hazardous materials should be properly labeled and secured with secondary containment. Store materials indoors or under cover when possible. Avoid storing and using hazardous materials near a storm drain.



More information about NDOT's stormwater program, including illicit discharge reporting, can be found on NDOT's website at www.nvadotdot.com.

Additional information about stormwater BMPs can be found on the U.S. EPA's website at <http://www.epa.gov/bmpdocs>.



Waste Disposal
Store wastes in covered bins sheltered from the rain. Don't dispose liquid wastes in garbage bins. Clean up and properly dispose of waste materials on a frequent basis.

General Housekeeping
Regularly sweep paved areas to remove sediments and other materials that might be flushed into the storm drains. Pick up rubbish. Contain and clean up spills. Never wash spills or other materials into a storm drain. Use "dry clean up" methods.

Illicit Discharges
Never dump anything into the storm drain. If you see anyone dumping to a storm drain, call NDOT's spill response hotline immediately at (888) 331-6337.

Vehicles and Equipment
Avoid discharging vehicle wash water to a storm drain. Contain leaks and immediately repair leaking vehicles and equipment. Perform vehicle maintenance indoors or under cover whenever possible.

Landscape
Don't over apply fertilizers or pesticides. Control irrigation systems to avoid over watering and prevent runoff.

Training
Educate employees on your facility's stormwater pollution prevention measures.

Stormwater Best Management Practices

HOMEOWNERS

Protecting Nevada's Waters
Nevada Department of Transportation

Sometimes, homes can be a significant contributor of pollutants reaching our streams and lakes. Every homeowner must take steps to reduce the amount of pollutants leaving their property and entering the storm drain.

There are many actions, or Best Management Practices (BMPs), that can be taken to reduce water pollution from your home and property. Some commonly used BMPs around the home include:

Runoff
Avoid over watering. Over watering may lead to runoff reaching storm drains. Irrigation runoff may contain fertilizers, pesticides or other materials that are harmful to lakes and streams. Adjust irrigation times seasonally, watch for runoff and compaction, and turn off during storms.



Fertilizer and Pesticide Application
Never over apply fertilizers and pesticides. Follow the manufacturer's application instructions. Store fertilizers and pesticides indoors.

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Properly clean up
Contain any spills or over applications.

Regularly sweep
Sweep paved areas to remove sediments and other materials that could be flushed into the storm drains. Never wash spills, leaves, or auto fluids into a storm drain.

Waste Disposal
Store your garbage in covered containers and avoid placing liquid wastes in the waste container.

Vehicle Maintenance
Contain leaks from vehicles and promptly repair. Use shop pans when servicing vehicles and properly dispose of waste vehicle fluids. Promptly clean any vehicle fluid drips and spills using "dry clean up" methods and properly dispose of the waste material.

Vehicle Washing
Avoid discharging vehicle wash water and detergents into the storm drain. If possible, wash vehicles on grass or gravelled areas that will retain the water. Use home with automatic shut-off valves and environmentally friendly detergents.

Pet Wastes
Never dump anything into the storm drain (like paints, oils, or trash). If you see anyone dumping to a storm drain, call NDOT's spill response hotline immediately at (888) 331-6337.

Animal Wastes
Animal wastes can contaminate waters through the leachates of manure such as nitrogen, phosphorus, as well as microbial pathogens. Pick up and properly dispose of pet waste before it has a chance to enter the storm drain system.

Stormwater Best Management Practices

CONSTRUCTION SITES

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Nevada Department of Transportation

Construction sites can be potential sources of pollution to Nevada's waters. Every construction contractor must take steps to prevent pollutants from entering the storm drain system, where they can then find their way to our lakes and streams.

There are many actions, or Best Management Practices (BMPs), that can be taken to keep pollutants out of the storm drains. Some commonly used construction site BMPs include:

Sediment Control
Install sediment control measures around storm drains and along waterways and ditches. Use erosion control or soil stabilization measures on disturbed soil areas.



Concrete Washouts
Install proper washouts to contain concrete washes. Avoid open curing churning their footprints. Properly contain and dispose of all concrete wastes.

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Additional information about stormwater BMPs can be found on the U.S. EPA's website at <http://www.epa.gov/bmpdocs>.



Material Storage
Store materials in a neat and orderly fashion, and away from storm drains. Store materials indoors or under cover when possible. Hazardous materials should be properly labeled and secured with secondary containment.

General Housekeeping
Never wash spills or any materials into a storm drain or convenience ditch. Use "dry clean up" methods on wet spills. Install track-out devices to remove sediment from vehicles leaving the site. Sweep up sediments deposited on paved roads. Clean up and properly dispose of all waste materials on a frequent basis.

Illicit Discharges
Never dump anything into the storm drain. If you see anyone dumping to a storm drain, call NDOT's spill response hotline immediately at (888) 331-6337.

Equipment Maintenance
Contain leaks and immediately repair leaking equipment. Service vehicles and equipment at designated facilities whenever possible.

Training
Educate your employees on the site's stormwater pollution prevention measures.

Stormwater Best Management Practices

MINING & AGGREGATE FACILITIES

Protecting Nevada's Waters
Nevada Department of Transportation

Pollutants can be found in many of the products and materials used at mining and aggregate facilities. Every facility must take steps to prevent pollutants from entering the storm drain system, where they can then find their way to our lakes and streams.

There are many actions, or Best Management Practices (BMPs), that can be taken to keep pollutants out of the storm drains. Some commonly used BMPs include:

Material Storage and Storage Management
Locate material storage areas and discharge areas from storm drains and undercovers where possible. Install perimeter controls around all stockpiles. Near-line materials must be properly labeled and secured with secondary containment.

General Housekeeping
Never wash spills or sediments into a storm drain. Use "dry clean up" methods on wet spills. Properly dispose of all waste materials on a frequent basis.



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Additional information about stormwater BMPs can be found on the U.S. EPA's website at <http://www.epa.gov/bmpdocs>.



Properly clean up
Contain any spills or over applications.

Regularly sweep
Sweep paved areas to remove sediments and other materials that could be flushed into the storm drains. Never wash spills, leaves, or auto fluids into a storm drain.

Waste Disposal
Store your garbage in covered containers and avoid placing liquid wastes in the waste container.

Vehicle Maintenance
Contain leaks and immediately repair equipment. Service vehicles and equipment at designated areas when possible.

Vehicle Washing
Avoid discharging vehicle wash water and detergents into the storm drain. If possible, wash vehicles on grass or gravelled areas that will retain the water. Use home with automatic shut-off valves and environmentally friendly detergents.

Pet Wastes
Never dump anything into the storm drain (like paints, oils, or trash). If you see anyone dumping to a storm drain, call NDOT's spill response hotline immediately at (888) 331-6337.

Animal Wastes
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Stormwater Brochure

What is Stormwater?

Stormwater is rainfall or snowmelt that runs off surfaces such as roads, compacted ground surfaces and rooftops. Stormwater runoff can pick up and carry pollutants like sediment, oil and grease, metals, toxic household cleaners, organic debris, animal waste and litter that eventually flows into streams, rivers, ponds, lakes and oceans.

Sewer Systems and Storm Drains

In Nevada, sewer systems and stormwater drains are two different things. Water that goes down a sink or toilet flows to a wastewater treatment plant where it is treated and filtered. Water that flows down downspouts and streets into a gutter goes directly into a storm drain that flows untreated into a lake, river or stream. Pollutants in stormwater can contaminate our waters and harm or kill off local wildlife.

Pollution is a problem and we can all be a part of the solution!

- Pick up pet waste and dispose of it properly.
- Use pesticides and fertilizers sparingly.
- Use organic mulch or safer pest control methods.
- Rake leaves and compost or mulch yard waste. Don't leave it in the street or sweep it into storm drains.
- Don't pour household hazardous waste onto the ground or into storm drains.
- Contact your local environmental, health or solid waste agency for information about how to properly dispose of these substances.

Don't be a Dirty Drop!

Illicit Discharges
Never dump anything into the storm drain (like paints, oils, or trash). If you see anyone dumping into a storm drain, call NDOT's spill response hotline immediately at (888) 331-6337.

We can all help to PROTECT NEVADA'S WATERS today and for future generations!

For more information and educational resources visit:
www.nvadotdot.com
1263 S. Stewart St.
Carson City, Nevada 89712

Brian Santel, Governor Rudy Markoe, P.E., Director

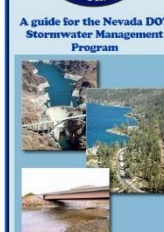
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A guide for the Nevada DOT Stormwater Management Program



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PUBLIC OUTREACH

Events & Meetings

STEM / STEAM NIGHT
(Science, Technology, Engineering,
the Arts and Math)
Eagle Valley Middle School

**Nevada Water Environmental
Association (NWEA) conference**

**I-515 project in Las Vegas
Public meeting**

**Cave Rock project
Public Meeting**

**Partnering with other NDOT groups
to share booths at upcoming events**





WEBSITE UPDATES

- Enhanced Stormwater icon and links on NDOT home page
- New Illicit Discharge Reporting form & Comments form
- FAQ section
- Emergency contacts
- Public involvement information and education materials
- Resources and documents





LAKE TAHOE

Major Projects Completed in the last 5 Years

- SR 431 Mt. Rose Highway
- SR 28 Incline Village to Stateline
- SR 28 / SR 431 Roundabout
- SR 207 Kingsbury Grade
- US 50 Slope Stabilization
- Round Hill Bike Path
- Incline Village Green Streets Water Quality Basins
- Kingsbury Maintenance Yard
- Purchased 3 Best Available Technology (BAT) Abrasive Spreaders
- Purchased 2 BAT Sweepers



LAKE TAHOE

Most recent pollutant load reduction estimates show that NDOT has met and exceeded sediment reduction goals for the Lake Tahoe Basin. The efforts of District II Maintenance Staff have been instrumental in the success of the program.

We will continue to develop plans to meet pollutant reduction goals for water quality projects with an increased focus on maintenance practices.

Current Projects with Water Quality Improvement Aspects

- US 50 Cave Rock
- SR 28
- US 50 Burke Creek
- US 50 Zephyr Cove



ASSET MANAGEMENT

The Consent Decree requires a number of automated inventory and mapping capabilities.

- A system to track all active construction projects
- A tracking database for all post-construction control measures
- Database to record location and descriptive information on all outfalls
- Database to maintain records of all outfall inspections and illicit discharge investigations
- A comprehensive storm sewer system map of all assets

Integrated asset management can address all of these needs.



ENTERPRISE ASSET MANAGEMENT SYSTEM (EAMS)

NDOT is preparing to develop an integrated asset management program, called EAMS.

Short term – a number of interim systems, compatible with EAMS when it is ready.





STORMWATER PROGRAM

Protecting Nevada's Waters

NDOT is developing a dedicated Stormwater Division that focuses on meeting and exceeding the stormwater provisions of the Clean Water Act.

